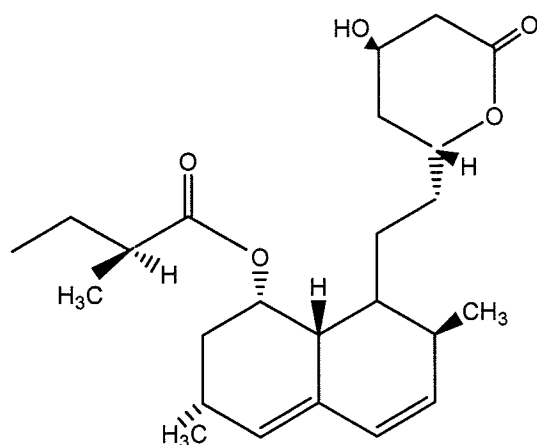


The listing of claims presented below replaces all prior versions and listings of claims in the application.

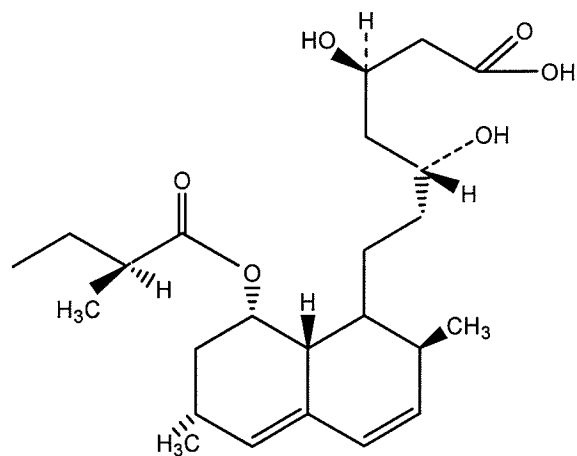
## IN THE CLAIMS

1. (Currently amended) A method for lactonisation of mevinolinic acid of formula II and isolation of Lovastatin of formula (I):



which comprises the steps of:

- a) adjusting the pH of a fermentation broth containing mevinolinic acid(II) to  $3.5 \pm 0.1$  with a mineral acid, and optionally filtering the fermentation broth,
- b) adding a hydrophobic solvent to the aqueous fermentation broth or the mycelia cake and bubbling an inert gas into the biphasic mixture,
- c) heating the fermentation broth or the mycelia cake at  $55 \pm 5^\circ\text{C}$ , in the presence of a hydrophobic solvent, carrying out lactonisation of mevinolinic acid (II)



and extracting Lovastatin(I) into a hydrophobic solvent, concurrently, in a time period between 12-19 hours, under constant nitrogen bubbling,

d) isolating impure Lovastatin (I) from said hydrophobic solvent,

e) purifying impure Lovastatin (I) by dissolving impure Lovastatin (I) in a chlorinated solvent followed by removal of suspended resinous impurities by filtration, adding a hydrophobic solvent, heating the mixture to  $55 \pm 5^{\circ}\text{C}$ , evaporating the chlorinated solvent followed by crystallization from a hydrophobic solvent to give pure Lovastatin (I) of purity  $\geq 98.70\%$ , or by dissolving Lovastatin (I) in a mixture of a chlorinated solvent and a hydrophobic solvent, filtering the suspended impurities, and heating the mixture to  $55 \pm 5^{\circ}\text{C}$ , followed by evaporating the chlorinated solvent and crystallizing from the hydrophobic solvent to give pure Lovastatin (I) of purity  $\geq 98.70\%$ ,

f) recrystallising Lovastatin (I), from an aliphatic alcohol, by heating Lovastatin (I) with an aliphatic alcohol between 65 to 75°C for 30 minutes, cooling the mixture between -5 to +5°C and filtering crystalline Lovastatin (I) followed by drying at 35-40°C to give pure Lovastatin (I) of purity  $\geq 99.3\%$ , substantially free from impurities and conforming to pharmacopoeial specification.

2. (Currently amended) A method as claimed in claim 1, wherein said pure Lovastatin (I) is further purified by heating said pure Lovastatin in the presence of alumina in a water miscible solvent at a temperature in the range of 50-60°C, filtering the mixture and crystallizing extrapure Lovastatin (I) of purity  $\geq 99.5\%$  conforming to pharmacopoeial specification.

3. (Original) A method as claimed in claim 1, wherein said steps of lactonisation and concurrent extraction by a hydrophobic solvent are carried out in a time period of not more than 20 hours.

4. (Previously Presented) A method as claimed in claim 1, wherein the acid used for adjusting the pH is a mineral acid.

5. (Original) A method as claimed in claim 4, wherein said mineral acid is hydrochloric acid, sulphuric acid, nitric acid or orthophosphoric acid.

6. (Previously Presented) A method as claimed in claim 1, wherein said hydrophobic solvent is selected from aliphatic hydrocarbon, aromatic hydrocarbon, and chlorinated hydrocarbon.

7. (Previously Presented) A method as claimed in claim 1, wherein said lactonisation of melvinolinic acid (II) and extraction of Lovastatin (I) is carried out at a temperature in the range of 50-60°C.

8. (Previously Presented) A method as claimed in claim 1, wherein the inert gas bubbled in the reaction medium is selected from nitrogen, argon and helium.

9. (Previously Presented) A method as claimed in claim 1, wherein said chlorinated solvent required for dissolving impure Lovastatin (I) is selected from dichloromethane, 1,2-dichloroethane and chloroform.

10. (Previously Presented) A method as claimed in claim 1, wherein said aliphatic alcohol employed for recrystallisation of Lovastatin (1) is isopropanol.

11. (Original) A method as claimed in claim 2, wherein the water miscible solvent is selected from ketonic solvent and an alcoholic solvent.

12. (Original) A method as claimed in claim 11, wherein said ketonic solvent is acetone.

13. (Original) A method as claimed in claim 12, wherein said alcoholic solvent is isopropanol.

14. (Original) A method as claimed in claim 2, wherein said alumina is selected from acidic alumina, basic alumina, neutral alumina.